

**THIS OPINION WAS NOT WRITTEN FOR PUBLICATION**

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* JOHN B. GEROW

---

Appeal No. 96-0555  
Application No. 08/156,741<sup>1</sup>

---

ON BRIEF

---

Before MEISTER, ABRAMS and McQUADE, *Administrative Patent Judges*.

ABRAMS, *Administrative Patent Judge*.

**DECISION ON APPEAL**

This is an appeal from the decision of the examiner finally rejecting claims 1 and 3-9, which constituted all of the claims of record in the application at that time.<sup>2</sup> Since

---

<sup>1</sup>Application for patent filed November 24, 1993.

<sup>2</sup>Paper No. 5, the final rejection, erroneously indicates that claim 2 was included in the rejection. However, claim 2

Appeal No. 96-0555  
Application No. 08/156,741

the final rejection, however, claim 5 has been canceled (Paper No. 6) and the examiner has withdrawn the final rejection of claims 1-4, 6 and 7, having been convinced by the appellant's arguments that they are allowable (Paper No. 11). Therefore, only claims 8 and 9 are before us on appeal.

The appellant's invention is directed to an electrical connection system. The claims on appeal can be found in an appendix to the Brief.

#### **THE REFERENCES**

The references relied upon by the examiner to support the final rejection are:

Webber 1945	2,379,942	Jul. 10,
Carr et al. (Carr) 1956	2,754,487	Jul. 10,
Vrobel 1972	3,649,956	Mar. 14,
Powell 1987	4,653,839	Mar. 31,

#### **THE REJECTION**

---

was canceled in Paper No. 4.

Appeal No. 96-0555  
Application No. 08/156,741

Claims 8 and 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over Powell or Vrobel in view of Carr or Webber.<sup>3</sup>

The rejection is explained in the Examiner's Answer.

The opposing viewpoints of the appellant are set forth in the Brief.

#### **OPINION**

The rejection is under 35 U.S.C. § 103, which means that the examiner bears the initial burden of presenting a *prima facie* case of obviousness (see *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993)), which is established when the teachings of the prior art itself would appear to have suggested the claimed subject matter to one of ordinary skill in the art (see *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993)). This is not to say, however, that the claimed invention must expressly be suggested in any one or all of the references. Rather, the

---

<sup>3</sup>The Answer erroneously states that the rejection also includes claims 5 and 7, the former of which was canceled, while the latter was allowed.

Appeal No. 96-0555  
Application No. 08/156,741

test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art (see *Cable Electric Products, Inc. v. Genmark, Inc.*, 770 F.2d 1015, 1025, 226 USPQ 881, 886-87 (Fed. Cir. 1985)), considering that a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference (see *In re Bozek*, 416 F.2d 1385, 1390, 163 USPQ 545, 549 (CCPA 1969)), with skill being presumed on the part of the artisan, rather than the lack thereof (see *In re Sovish*, 769 F.2d 738, 742, 226 USPQ 771, 774 (Fed. Cir. 1985)).

The crux of the argument advanced by the appellant with regard to claims 8 and 9 is that there would have been no reason for one of ordinary skill in the art to modify the connector devices of Powell and Vrobel by providing them with elastomeric material in the manner required by the claims. We agree with the appellant with regard to Vrobel, but not with regard to Powell.

Appeal No. 96-0555  
Application No. 08/156,741

Claim 8 is directed to a connection system which includes first and second mateable connector assemblies, the first of which is provided with a plurality of pin contacts and the second having sockets for receiving pins. The front end of the first assembly has a layer of elastomeric material, and the pins project through and forward of the elastomeric material. The "characterized by" portion of claim 8 requires that the second connector have a front portion forming passages "which are tapered to guide said pin-type front ends into said sockets," and that it be formed of rigid material.

Vrobel discloses a cable connector that incorporates some of the components described in claim 8. The examiner points to unnumbered tapered portions in the face of ceramic insert 40 as being the tapered entrances to passages which receive pins 34. However, this face is deep within the device and would not appear to be in need of additional sealing protection. This being the case, we fail to perceive any teaching, suggestion or incentive which would have led one of ordinary skill in the art to install an elastomeric material on the face of member 22, from which the pins protrude.

For this reason, it is our opinion that a *prima facie* case of obviousness is not established with regard to either of the rejections in which Vrobel is the primary reference, and we will not sustain these rejections.

That is not the case, however, with Powell. The connection system disclosed in this reference comprises a first insulator 23 having an exposed face from which a plurality of contacts 32 protrude, and a second insulator 40 having an exposed face in which there are sockets to receive pins. The entrance 54 to each socket is tapered. The patent teaches that the connection system "is designed for use in hostile environments where [it] . . . might be subjected to dirt and corrosive materials," and that it is designed to mate with male and female "push-on" socket connectors (column 2, lines 12-17). Powell does not disclose or teach providing an elastomeric material on the face through which the pins protrude, and it would appear that both that face and the face having the sockets are of rigid material.

Webber discloses a connector comprising a plug member 6 which terminates in a convex resilient end surface 35 through which a pin 8 protrudes. Jack member 7 terminates in an end

surface 36 having a socket 9. The patent teaches that "provided the convex surface 35 has sufficient resiliency, the plane surface 36 need not be of resilient material" (page 2, column 1, lines 34-36). The purpose of the elastomer material is to insure that air, which is considered detrimental to the connection, is not present (page 2, column 1, line 15 *et seq.*).

From our perspective, it would have been obvious to one of ordinary skill in the art, in view of Webber, to modify the Powell connector by placing a layer of elastomeric material over the face through which the pins protrude and, to the extent that it might not be implicit in Powell that the face in which the sockets are installed is rigid, to so construct it. Motivation for doing so is found in the explicit teachings of Webber that such improves the soundness of the connection, considered with the explicit requirement of Powell that the connector be useable in a hostile environment. The requirement in dependent claim 9 that the elastomeric face be convex is taught by Webber.

Appeal No. 96-0555  
Application No. 08/156,741

The rejection of claims 8 and 9 based upon Powell and Webber therefore is sustained.

We reach the same conclusion with regard to the rejection on the basis of Powell in view of Carr. The latter reference discloses a curved face 16a of "soft silicone Rubber" (column 2, line 52) through which a pin extends. The pin is received in the tapered entrance 36a of a socket located in a front face that can be, at least in part, of a "somewhat harder material." The reference teaches that the convex surface presses "firmly and completely" upon the other surface (column 7, line 14). It is our conclusion that, in view of the teachings of Carr, one of ordinary skill in the art would have found it obvious to cover the face of Powell through which the pins protrude with a convex elastomeric material.

We are not persuaded by the appellant's arguments that those rejections which we have sustained are without merit. Our position with regard to them should be apparent. In addition, we point out that, in large part, the appellant's arguments focus upon limitations which were not present in claims 8 and 9, and therefore fail at the outset. See *In re Self*, 671 F.2d 1344, 213 USPQ 1 (CCPA 1982).



Appeal No. 96-0555  
Application No. 08/156,741

**SUMMARY**

The rejections of claims 8 and 9 on the basis of Vrobel in view of Webber and Vrobel in view of Carr are not sustained.

The rejections of claims 8 and 9 on the basis of Powell in view of Webber and Powell in view of Carr are sustained.

A rejection of each of the claims having been sustained, the decision of the examiner is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

**AFFIRMED**

	JAMES M. MEISTER	)	
	Administrative Patent Judge)	)	
		)	
		)	
	NEAL E. ABRAMS	)	BOARD OF
PATENT	Administrative Patent Judge)		APPEALS AND

Appeal No. 96-0555  
Application No. 08/156,741

) INTERFERENCES  
)  
)  
JOHN P. McQUADE )  
Administrative Patent Judge)

Appeal No. 96-0555  
Application No. 08/156,741

Leon D. Rosen  
Freilich, Hornbaker & Rosen  
10960 Wilshire Boulevard  
Suite 840  
Los Angeles, CA 90024